"OUR PAPPIES BURNED THE WOODS"

And Set a Pattern of Human Behavior in Southern Forests That Calls for New Methods of Fire Prevention

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(Photographs by the Forest Service)

"WOODS burnin' 's right. We allus done it. Our pappies burned th' woods an' their pappies afore 'em. It war right fer them an' it's right fer us."

So spoke a lean resident of the piney woods—one of hundreds I interviewed in the course of a six months' study last year during which as a psychologist I was supposed to find the "inner-most" reason why inhabitants of the forest lands of the South cling persistently to the custom of burning the woods.

"Fires do a heap of good," continued my "patient."
"Kill th' boll weevil, snakes, ticks an' bean beetles. Greens up the grass. Keeps us healthy by killin' fever germs."

When I asked if more timber growing on unused lands might make living better for the local people he allowed not. "Might hol' the floods a mite and make a few more squirrels," he conceded, "but it ud make living harder and we'd see more rattlesnakes."

These homely words sum up a long accepted explanation of the annual fires that for more than a century have characterized the land and social economy of our southern states. The extent of the annual burnings, the harm they do and the barrier they raise to sucessful forest culture throughout the South are well known to federal, state and private forest agencies. On their walls hang maps and records showing that approximately one-half of the forest fires occurring yearly in the United States are recorded in the eleven southern states. And what is more challenging is the fact that over ninety per cent of these southern fires are caused by the hand of man. The average southerner is inclined to accept the record and the practice as a sort of birthmark upon the land about which little can be done. Outsiders visiting or motoring in the South during burning seasons, however, are



"Pappy" and sons—residents of a national forest in the South. "Their strongest law is the custom of their forefathers," says the author

shocked and appalled by the miles of fire running free in the woodlands and the palls of smoke that dull the sun and often make motoring hazardous.

"Why," they demand, "cannot these fires be stopped or controlled?"

The question is one with which all forest agencies have been at grips for the past twenty years. Hundreds of thousands of dollars of public and private funds are spent annually in efforts to prevent the fires and to extinguish or control them after they have been set by unseen hands. Progress has been made but all too slowly, as evidenced by the fact that each year the number of man-caused fires remains at an appalling height. Prevention efforts have been predicated largely upon educational activities but results indicate that these educational serums either have been too dilute or have not reached the blood-stream of the fire-minded population.

Seeking a new educational approach, the federal Forest Service last summer decided to delve deeper into the human or social roots of the woods-burning problem. It was hoped that here might be found a point of vaccination that with an improved educational serum would reach the germs of the woods-burning desires. Accordingly, a unit of a National Forest in the Deep South was selected for study by a psychologist. This particular area lies along the southernmost spur of the

Blue Ridge Mountains and embraces some 440,000 acres within which live 1,800 rural families, or some 10,000 people. They constitute the primary fire problem of the region. Surrounding it are additional farms, towns and a few small cities whose inhabitants use the forest for recreational or industrial pursuits. They constitute the secondary fire problem.

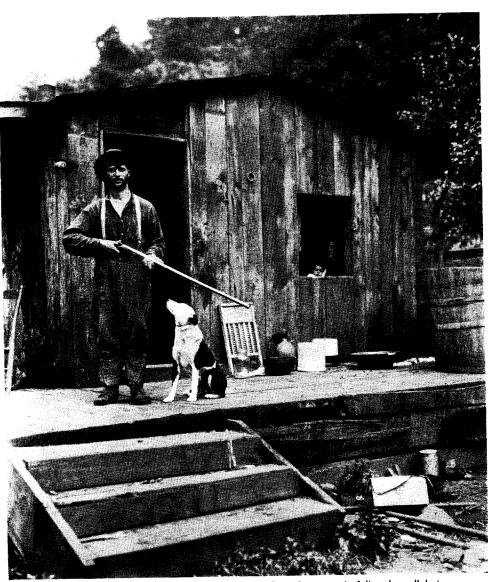
The selection of this forest unit was made much as one would plug a watermelon. We believed it would be typical of and apply quite generally to most other woods-

basis of race, social status, education, location, occupation, and levels of income. Families were then selected as typical of the different groups and studied by a technique known as the controlled interview which brought us a great mass of interesting and pointed information. For example, we found that on the basis of 1,800 families these people are reproducing themselves at a rate fifty per cent higher than that of the nation as a whole. While urban reproduction is declining, they are doubling their numbers every twenty-eight years. Most of them

live in three-room, unpainted frame cabins with families ranging from two to eleven in number. They are getting poorer—and admit it—due to low cotton prices, lack of markets for other farm products, exhaustion of game and fish and impoverishment of the soil.

Taking the information gathered by interviews and first-hand observations and interpreting it under the three general heads of anthropology, sociology and psychology, we found that these people are living at or near the level of frustration. Family income ranges from \$125 to \$200 a vear as against \$480 for the State and \$750 for the nation as a whole. Ninety-nine per cent of them are ill fed, ill housed and ill clothed. Their political structure is a rugged family individualism. National and state politics interest them little. Their strongest law is the custom of their forefathers and their blood kin relationships have hardened into rigid codes. Their education is equivalent to that of the third or fourth grade. They value tradition more than book learning. What their fathers and grandfath-

ers did was "right." Their religion is the fundamental Protestantism of their forefathers intermixed with a fair number of superstitions. Their pleasures or recreations are few and individualistic. The exhaustion of game and fish has about extinguished their two main pleasures, with the result that whittling and talking have become their major forms of recreation. There is a paucity of social gatherings and these are confined mostly to country stores or filling stations. While a few of them do chair caning and basket weaving, there is almost a complete lack of technology among them. Now and then a fiddler is found but music and musical instruments are



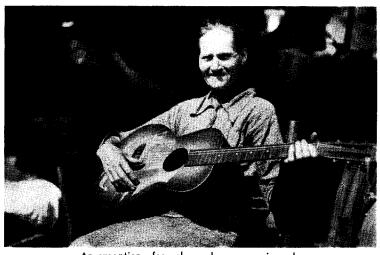
Hunting — long one of the chief pleasures of southern woods folk — has all but gone with the increasing scarcity of game, adding to the frustration of the group

burning sections of the South. The people we had to deal with are of English, Irish, Scotch stock, whose ancestors have lived on the land from three to five generations. Emigrating by wagon from the Carolinas during the decades 1820-1850, these early settlers were cotton-corn farmers seeking new homes in new lands. Many of them were too late for the rich valley land that already had been pre-empted and they were forced to take the "leavings" on the less desirable hillsides and in the forests.

To get at the human impulses which dominate these people we followed methods similar in part to those of the Gallup poll. The population was grouped on the

conspicuous by their absence. Books and periodicals are almost totally absent. We saw no evidence of painting, draftsmanship or sculpture, practically no pictures on the walls—not even calendars.

A sociological picture of the group as a whole shows it occupying an uncomfortable place in the class and caste system of the South. They are



An exception—for only rarely were music and musical instruments found among these people

his roof. To them schools are something merely for children to go to for a few years. Church is an institution of fundamentalist religion, mostly of Methodist, Baptist and Holy Roller persuasion. It is both a means of salvation and emotional stimulation. It is still reserved for God and God's work - not for social purposes. By



Most of them live in three-room, unpainted cabins, with families ranging from two to eleven in number

"poor whites" looked down upon by the upper and middle class whites and failing to have the respect even of the negroes. Economically and socially they are a frustrated group. The family structure, as has been said, is patriarchal. The elder male --"pappy" — is accepted as final authority by all blood kin and by the inlaws who live under



A pappy and his daughter splitting shakes for their cabin

occupation these people are predominantly still cotton-corn farmers and approximately eighty-five per cent make their living by farming. The remainder are divided among occupations in saw-milling, cotton-milling in nearby towns, and moonshining.

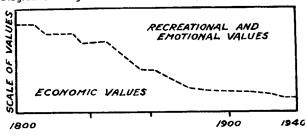
Appraising them psychologically, they are of average and above average intelligence with a

lowered educational level. In point of need for income, for social belongingness, and for prestige, and craving for excitement, they are at the bottom of the ladder. Only their needs for security and their craving for religion appear moderately or adequately served.

Summing up, we found we were dealing with an agrarian group whose culture pattern favors woods-burning because of long standing customs and an agrarian culture pattern that is in conflict with an unfavorable forest environment. Like all human cultures, this agrarian group is exploiting its environment in ways peculiar to its culture. Their particular culture employs outmoded agricultural practices based upon the tradition of their forefathers who believed in woods-burning.

The roots of the fire problem obviously go deep into the culture, the traditions and the customs of these people and their frustrated lives. It is well established in psychology that groups and individuals when frustrated express themselves by harmful acts, called aggression, either against other humans or against their environment. Many fires are set to get back at outsiders, particularly officials and CCC boys placed among them to fight woods fires. These intentional fires of the malicious type, however, are in the minority. Non-malicious woods-burning constitutes the major cause growing out of a survival of the pioneer agrarian culture originally based on economic grounds. With the closing in of the agrarian environment, it has become predominantly a recreational and emotional impulse. Woods-burning in the South is a survival of an old culture. In the course of time-a little more than a century—the values of woods-burning have changed. They were once predominantly economic. Now they are predominantly recreational and emotional to these southern ruralists. The change in values is illustrated in the accompanying graph, which covers 140 vears from 1800 to 1940.

Diagram Showing Southern Woods Burning as a Cultural Survival



The sight and sound and odor of burning woods provide excitement for a people who dwell in an environment of low stimulation and who quite naturally crave excitement. Fire gives them distinct emotional satisfactions which they strive to explain away by pseudo-economic reasons that spring from defensive beliefs. Their explanations that woods fires kill off snakes, boll weevil and serve other economic ends are something more than mere ignorance. They are the defensive beliefs of a disadvantaged culture group.

This being the problem, what can be done about it? Mere propaganda and prohibitions are about as effective as a pop-gun against an elephant. The southern agrarians will continue in their beliefs until actual demonstrations convince them of a better way. The cure would seem to lie in well established methods of habit breaking and human learning applied to forest groups by blocking off the old undesirable habit, and by encouraging and rewarding the new, more desirable habit. The Federal Forest Service has two tools for dealing with this problem in the national forests and the same may be said for state agencies. By law enforcement it can block off the old habit of woods-burning,-provided it can catch its men. And through the Department of Agriculture it has abundant facilities for education and the promotion of social betterment, improved agriculture and soil conservation. Unfortunately they are not being sufficiently brought together and implemented at focal points within the forest boundary. Until this is done the Department will fail to reach the main source of the southern fire problem—the forest resident.

On the basis of our study, there appears little doubt that the first point of attack in solving the woods-burning practice must be with the forest residents who believe in woods-burning. Without their cooperation little can be done to gain effective fire prevention either on their part or on the part of non-resident visitors. If the needs of the national forests or of forest culture generally in the South are to be served, the needs of the people who live in the woods and are now setting them afire must be considered. In brief, these two sets of needs must be brought closer together in a plan of mutual service. Forest agencies must make themselves insiders with the people with whom they have to deal. They must serve their social needs while waiting for the return of better living conditions under a slow-growing forest economy.

How can this be done? A ten point program of edu-

cation through social action is suggested:

- (1) In selected forests throughout the South set apart six to eight small tracts of from 100 to 500 acres each to be used in demonstrating to local residents methods and results of improved land use. It must be borne in mind that these people know practically nothing of forest values or of what improved agricultural, forest and soil practices may do for them. The small demonstration "islands" are intended to serve in the same way as does grafted skin on a large burned area of the human bodyform new growth and gradually spread over surrounding areas.
- (2) In each demonstration area the local residents should be encouraged and if necessary engaged at wage rates to construct a simple, inexpensive building with a seating capacity of from 200 to 250 persons to form a sort of forest People's Center for community gatherings and social intercourse. These buildings should be suitable for motion picture shows and dances. There should be an ample supply of benches and other simple equipment, not forgetting cuspidors and a supply of soft pine sticks for whittling, for it must be remembered that these people are spitters no less than whittlers. The error of having these buildings constructed by outsiders should be avoided because their success will depend upon making the local residents feel that they have a personal part in them.
- (3) If necessary suitable roads should be constructed to these People's Centers so that they may be reached without too great difficulty. While CCC labor might be employed if discretion is used, it would be preferable to have the road work done by the local residents.
- (4) The Center completed, it then falls upon a designated forest officer, who always acts as host, to take leadership in getting the local residents interested in using it as a community center. This could be done by various programs and meetings in which entertainment would have the major part with discussion of local community questions secondary, at least at the start. These people would turn out for a motion picture show or a dance and the more the forest officer can make them feel that the Center is their meeting place, (Continuing on page 174)

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of the Department of the Interior in working out a joint plan of operation when the necessity arises. The Forest Service, although owning a very small percentage of the stumpage, has encouraged the plans for selective logging in every way possible. The Pacific Northwest Forest Experiment Station assisted by marking a sample plot to be cut and lent its technicians for planning and carrying out the mill studies. Western Pine Association foresters also aided with advice and the Soil Conservation Service also is doing its bit. Quietly it has started a co-operative project for improving forage and restocking to trees the company's older cut-over lands. For this it has sought no publicity, apparently well satisfied to contribute what it can within its own sphere of work. To any one close to the developments in both public and private forestry during the past few years, this particular operation holds much interest. It illustrates the fact that better national forestry can result only from the co-operation of all individuals and agencies having an interest in the outcome. And what may we expect as the outcome? I, for one, fully expect the forest management to be successful and to prove an admirable example of commercial forestry under existing handicaps because it has been inaugurated on a sound basis of facts developed from four years of field work; it is not a paper plan, prepared in the office from insufficient data and based on wishful thinking; it will be efficiently carried out as a matter of good business, rather than a useful bit of publicity and because this comparatively small company now employs four young foresters who are proving their value in dollars and cents as they go along.

And what should it prove? That a successful lumbering operation, giving its men an average income of over \$1,500 a year, attractive living conditions, and steady work, can get along without strikes and other unnecessary labor difficulties. That western pine lands, even under diverse public and private ownership, can be operated on a co-operative forestry basis, without subsidies and without federal or state agencies seeking to control its operations. And that with real cooperation and intelligent management, a stable and permanent lumber industry supporting prosperous and permanent communities can be assured. In short, that Klickitat Pine need never be a vanishing resource.

"Our Pappies Burned the Woods"

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the better.

(5) As local interest in the Center increases the forest officer should then by democratic procedure get the local residents to elect one of their number to act as caretaker of the Center. It would be his responsibility to emphasize the many uses of the Center to the people and make clear that its continued use depends upon protection of the property by the people themselves. With this principle established and accepted, he could then lead them to ideas and advantages of forest protection and gradually get them to feel that responsibility. In this as in all other activities, the forest officer must be guided by the patriarchal character of these families. His programs should be planned to interest and serve entire families but he should point up all his plans for cooperation so that they gain the consent of "pappy"—the male head of the family. Once he wins the cooperation of half a dozen "pappies" in one of these rural communities, he will have won the co-operation of their numerous progeny and blood kin.

(6) This step in the program calls for the development of outside social activities at the People's Centers. These may take the form of providing for simple games or contests, such as horseshoe pitching and a shooting range. We found no 4-H clubs among these people. Organization of these clubs might well emanate from the People's Center. There is also opportunity to interest the boys and girls in archery and in wood craftsmanship.

(7) Having established the Centers on a social basis, the groundwork has been laid for educational service in better land use and related economic questions. These people want to make a better living. They want to see hunting and fishing brought back. They want some social and emotional outlets and they want a feeling of prestige in their circumscribed lives. Having served them in this direction, their minds, it seems certain, will be more and more opened to educational ideas that could be woven into the recreational programs and activities. The opportunities are numerous. County and home demonstration agents could be called in to demonstrate by word and picture improved agricultural and home practices. Foresters and soil conservationists could do the same in their fields, bearing in mind that the demonstration area in the meantime has been handled to show results of good and bad soil and forest management. While these people resent direct preachments and commands, our study revealed they would take such forms of aid and education gladly.

(8) As plank eight in the program, organization of local fish, game and forest protective associations is suggested as a highly valuable cooperative activity between the Forest Service and community leaders. These associations should begin probably as fish and game organizations because that is a first interest and then gradually spread to the protection of forests against fire, stressing its influence towards better fishing and hunting. Working through the "pappies" of the community, the organization of these associations should not be difficult. Once these people give their word they generally keep it. Under this set-up, if individuals in the communities break their word, set fires or become game hogs, it would be well to let the local "pappies" deal with them. They usually know them and can get to them quicker than the law.

(9) Exhibits of local forest resources which, intelligently used, might improve the living of these people, should be installed in display cases in the People's Center. Forest officers should point out the various resources and how they might be handled to improve local living conditions. These exhibits should stress the raw material, a product partly finished by man and finally the finished product

ready for use. Handicrafts and marketing possibilities should not be overlooked.

(10) The purpose of the demonstration area being to demonstrate the value of building up a forest economy will, of course, take years to accomplish, but the benefits of the People's Centers will be felt within a few months. The two, however, must work together so that the people coming to the Center will mark the gradual change in forest and land conditions. As these changes become noticeable they may be taken advantage of and made features of community meetings in the form of outdoor lectures and demonstrations. These people are not particularly interested in the growth and condition of young trees but we found that mention of loss of soil brought about by burning the woods caught their attention. One of the surprises of our study was that practically all of the farmers in the forest complained of erosion and diminished fertility of their soil, but not one of them ever connected it up with woods-burning. The demonstration areas will provide graphic ways and means of getting information accepted that apparently today flows off the backs of these people like water off the back of a duck.

The foregoing plan, it will be seen, is based on our study and conclusion that the best way to prevent man-caused fires in southern forests is to begin at the source. That source is human beings and their motives. This means diverting the motives of woods-burning into more constructive channels. It proposes doing so by improving the lot of the impoverished forest resident by working hand in hand with him. Remedial measures are all designed to work with, not against, the grain of human nature. In such ways time can be saved in changing human behavior patterns and lasting fire prevention achieved.

Southern "woods burnin" is a human problem and should be tackled in the scientific and human way.